

Presidio Parkway Project Public-Private Agreement Volume III (Manuals and Guidelines)

DRAFT – May 25, 2010

TABLE OF CONTENTS

1. l	NTRODUCTION	1
1.1	. California Department of Transportation (Caltrans)	1
1.2	. American Association of State Highway and Transportation Officials (AASHTO)	3
1.3	. American National Standards Institute (ANSI)	3
1.4	. American Petroleum Institute (API)	3
1.5	. American Society for the Testing of Materials (ASTM)	3
1.6	. American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)	4
1.7	. Electronic Industries Alliance (EIA)	4
1.8	. Federal Highway Administration (FHWA)	4
1.9	. Illuminating Engineering Society of North America (IESNA)	4
1.1	0. Institute of Electrical and Electronics Engineers (IEEE)	5
1.1	1. Institute of Transportation Engineers (ITE)	5
1.1	2. International Commission on Illumination (CIE)	5
1.1	3. International Society of Arboriculture	5
1.1	4. National Cooperative Highway Research Program (NCHRP)	5
1.1	5. National Electrical Manufacturers Association (NEMA)	5
1.1	6. National Fire Protection Association (NFPA)	5
1.1	7. National Institute of Standards and Technology (NIST)	6
1.1		
1.1	9. Secretary of Interior	6
1.2	· /	
1.2	1. Texas Transportation Institute	6
1.2	2. Transportation Research Board (TRB)	7
1.2	3. Underwriters Laboratories (UL)	7
1.2	4. U.S. Army Corps of Engineers (US ACE)	7

1. INTRODUCTION

The following pages provide a non exclusive list of Manuals and Guidelines to be used for the Project

1.1. California Department of Transportation (Caltrans)

- 2006 (US Customary Standard) Plans Including New Standard Plans
- Approved Chemical List
- **Bridge Construction Records and Procedures**
- **Bridge Deck Construction Manual**
- Bridge Design Aids
- **Bridge Design Details**
- **Bridge Design Practice**
- **Bridge Design Specifications**
- Bridge Memo to Designers
- **Bridge Standard Detail Sheets**
- CADD Users Manual US Customary Units (English).
- California Amendments to the AASHTO LRFD Bridge Design Specifications
- California Test Methods (CTM)
- Caltrans Code of Safe Surveying Practices
- Construction Manual
- Construction Site Best Management Practices (BMPs) Manual
- Design-Build Modifications to the Standard Specifications for Construction
- Design Information Bulletin DIB 83-01 Caltrans Supplement to FHWA Culvert Repair Practices Manual (Updated 10-02-2006)
- Division of Engineering Services (DES) Memo to Designers 1-35, Foundation Recommendation and Reports
- Division of Engineering Services (DES) Memo to Designers 3-1, Deep Foundations
- Division of Engineering Services (DES) Memo to Designers 4-1, Spread Footings
- Division of Engineering Services (DES) Memo to Designers 5-20, Foundation Report / Geotechnical Design Report Checklist for Earth Retaining Systems
- Division of Engineering Services (DES) Memo to Designers 20-1, Seismic Design Methodology
- Division of Engineering Services (DES) Memo to Designers 20-10, Surface Fault Rupture Displacement Hazard Investigations
- Division of Engineering Services (DES) Memo to Designer 20-12 Site Seismicity for Existing and Temporary Bridges carrying Public Vehicular Traffic
- Doyle Drive Tree Removal Plan
- Falsework Manual
- Fiber Optics Design Guidelines
- Fish Passage Design for Road Crossings
- Foundation Manual
- Guidelines for Preparing Geotechnical Design Reports

- **Guidelines for Structures Foundation Reports**
- Highway Design Manual
- HOV Guidelines for Planning, Design and Operations
- Landscape Architecture Program PS&E Guide
- Level of Service Handbook (LOS2000)
- Maintenance Manual
- Manual for Quality Control and Quality Assurance for Asphalt Concrete
- Manual of Traffic Controls for Maintenance and Work Zones
- Manual on Uniform Traffic Control Devices (MUTCD)
- New Policy and Directives (Pavement Delineation and Singing)
- Office of Special Funded Projects Information and Procedures Guide
- **Outline of Field Construction Practices**
- Plans Preparation Manual US Customary Units (English)
- Plant Setback and Spacing Guide
- Prestress Manual, a Guide for Field Inspection of Cast in Place Tensioned Structures.
- Project Development Procedures Manual (PDPM)
- Ramp Meter Design Manual
- Ready To List and Construction Contract Award Guide (RTL Guide)
- Reference Sheets for Structural Design Aids Overhead and Roadside Signs
- Revised and New Standard Plans
- Safety Manual
- Seismic Design Criteria
- Sign Specifications
- Signal Design Detail Sheets
- Signal, Lighting and Electrical Systems Design Guide
- Signals, Lighting and Electrical Systems (ES Sheets)
- Soil and Rock Logging, Classification, and Presentation Manual
- Standard Environmental Reference
- Standard Highway Signs
- Standard Plans, U.S. Customary Units, (May 2006 Edition)
- Standard Special Provisions
- Standard Specifications, (May 2006 Edition)
- Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) **Preparation Manual**
- Storm Water Quality Handbook: Project Planning and Design Guide
- Structural Detailing Standards
- Surveys Manual
- Traffic Manual
- Transportation Electrical Equipment Specifications (TEES);
- Trenching and Shoring Manual

1.2. American Association of State Highway and Transportation Officials (AASHTO)

- A Guide for Transportation Landscape and Environmental Design
- A Policy on Geometric Design of Highway and Streets
- Bridge Welding Code, D1.5
- LRFD Bridge Construction Specifications
- **LRFD Bridge Design Specifications**
- Manual of Subsurface Investigations
- Model Drainage Manual
- Roadside Design Guide
- Roadway Lighting Design Guide
- Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals
- Standard Specifications for Transportation Materials and Methods of Sampling and Testing
- Structural Welding Code steel, D1.1

1.3. **American National Standards Institute (ANSI)**

- C2-81 National Electrical Safety Code
- Illuminating Engineering Society of North America Roadway Lighting ANSI Approved Standards, **Guides and Documents**

American Petroleum Institute (API) 1.4.

Recommended Practice for Planning, Design and Constructing Fixed Offshore Platforms – Working Stress Design

1.5. **American Society for the Testing of Materials (ASTM)**

- D1452 Standard Practice for Soil Exploration and Sampling by Auger Borings
- D1586 Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils
- D1587 Standard Practice for Thin-Walled Tube Sampling of Soils for Geotechnical Purposes
- D2113 Standard Practice for Rock Core Drilling and Sampling of Rock for Site Investigation
- D3550 Standard Practice for Thick Wall, Ring-Lined, Split Barrel, Drive Sampling of Soils
- D3740 Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
- D4220 Standard Practices for Preserving and Transporting Soil Samples
- D5079 Standard Practices for Preserving and Transporting Rock Core Samples
- D5778 Standard Test Method for Electronic Friction Cone and Piezocone Penetration Testing of Soils
- D5782 Standard Guide for Use of Direct Air-Rotary Drilling for Geoenvironmental Exploration and the Installation of Subsurface Water-Quality Monitoring Devices

- D5783 Standard Guide for Use of Direct Rotary Drilling with Water-Based Drilling Fluid for Geoenvironmental Exploration and the Installation of Subsurface Water-Quality Monitoring **Devices**
- D5876 Standard Guide for Use of Direct Rotary Wireline Casing Advancement Drilling Methods for Geoenvironmental Exploration and Installation of Subsurface Water-Quality Monitoring **Devices**
- D6151 Standard Practice for Using Hollow-Stem Augers for Geotechnical Exploration and Soil Sampling
- D6519 Standard Practice for Sampling of Soil Using the Hydraulically Operated Stationary Piston Sampler
- D7015 Standard Practices for Obtaining Intact Block (Cubical and Cylindrical) Samples of Soils

1.6. American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)

Handbook

1.7. **Electronic Industries Alliance (EIA)**

Standards

1.8. Federal Highway Administration (FHWA)

- Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and **Specifications**
- Design and Construction of Driven Pile Foundations, Volumes I and II
- Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes
- Drilled Shafts: Construction Procedures and Design Methods
- Geotechnical Engineering Circular No. 2, Earth Retaining Systems
- Geotechnical Engineering Circular Number 4, Ground Anchors and Anchored Systems
- Geotechnical Engineering Circular No 5, Evaluation of Soil and Rock Properties
- Handbook on Design and Construction of Drilled Shafts Under Lateral Load
- Hydraulic Design and Procedures Publications
- Hydraulic Engineering Circular Number 21 (HEC-21) Design of Bridge Deck Drainage Systems
- Manual for Design & Construction of Soil Nail Walls
- National ITS Architecture
- Title 23 Code of Federal Regulations (and Non Regulatory Supplements) Chapter 1, Part 752 Landscape and Roadside Development
- Traffic Control Systems Handbook

1.9. **Illuminating Engineering Society of North America (IESNA)**

- Lighting Handbook
- LM-50-99 Photometric Measurement of Roadway Lighting Installations
- LM-71-96 Photometric Measurement of Tunnel Lighting Installation

- RP-8 Roadway Lighting
- RP-19 Roadway Sign Lighting
- RP-22 Tunnel Lighting

1.10. Institute of Electrical and Electronics Engineers (IEEE)

- 80 Guide for Safety in AC Substation Grounding
- 81 Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a **Ground System**
- 730 Software Quality Assurance Plan
- 830 Recommended Practice for Software Requirements
- 1012 Software Verification and Validation
- 1016 Recommended Practice for Software Design Descriptions

1.11. **Institute of Transportation Engineers (ITE)**

Traffic Engineering Handbook

1.12. **International Commission on Illumination (CIE)**

88 Guide for the Lighting of Road Tunnels and Underpasses

1.13. International Society of Arboriculture

Guide for Plant Appraisal

1.14. **National Cooperative Highway Research Program (NCHRP)**

- Report 350-Recommended Procedures for the Safety Performance Evaluation of Highway **Features**
- Synthesis 360, Rock-Socketed Shafts for Highway Structures Foundations

1.15. **National Electrical Manufacturers Association (NEMA)**

Standards

1.16. **National Fire Protection Association (NFPA)**

- 10: Portable Fire Extinguishers
- 13: Sprinkler Systems
- 14: Installation of Standpipe and Hose Systems
- 20: Installation of Stationary Pumps for Fire Protection
- 24: Installation of Private Fire Service Mains and Their Appurtenances
- 25: Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
- 30: Flammable and Combustible Liquids Code
- 70 National Electrical Code
- 72 National Fire Alarm and Signaling Code

Draft

- 90A: Installation of Air Conditioning and Ventilating Systems
- 92B: Smoke Management Systems In Malls, Atria, And Large Spaces
- 101: Life Safety Code (2009 is current edition);
- 110: Emergency and Standby Power Systems
- 220: Types of Building Construction
- 241: Safeguarding Construction, Alteration and Demolition Operations
- 251: Tests of Fire Resistance of Building Construction and Materials
- 502 Standard for Road Tunnels, Bridges and other Limited Access Highways
- 1600: Disaster/Emergency Management and Business Continuity Programs
- 1963: Fire Hose Connections
- 2001: Clean Agent Fire Extinguishing Systems

1.17. National Institute of Standards and Technology (NIST)

SP 800-82 Guide to Industrial Control Systems (ICS) Security

1.18. Presidio Trust

- Policy for Waste Minimization in Construction and Demolition
- Presidio Trust Management Plan
- Presidio Trust Roads & Grounds IPM Program
- Presidio Trust Weed Management Guidelines
- Vegetation Management Plan
- Presidio Trails and Bikeways Master Plan & Environmental Assessment
- South Access to the Golden Gate Bridge Architectural Criteria Report August 2008

1.19. Secretary of Interior

- Standards and Guidelines for Archaeological Documentation
- Standards for the Treatment of Historic Properties: with guidelines for the Preservation, Rehabilitation, Restoration and Reconstruction

1.20. **Telecommunications Industries Association (TIA)**

- Standards
- TIA/EIA-455-171A, FOTP-171 Attenuation by Substitution Measurements for Short-Length Multimode Graded-Index and Single Mode Optical Fiber Cable Assemblies;
- TIA/EIA-455-61A, FOTP-61 Measurement of Fiber or Cable Attenuation Using an Optical Timedomain Reflectometer (OTDR).

1.21. Texas Transportation Institute

Intersection Video Detection Manual

Transportation Research Board (TRB) 1.22.

Highway Capacity Manual

1.23. Underwriters Laboratories (UL)

1971 Signaling Devices for the Hearing Impaired

1.24. U.S. Army Corps of Engineers (US ACE)

• Wetlands Delineation Manual